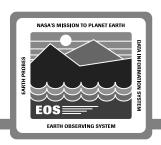


Communications & System Management - Introduction Ed Lerner

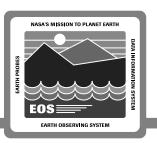
System Design Review - 29 June 1994

Road Map



- Purpose of CSMS briefing
- Role and Subsystems
- Subsystems and Open APIs
- Context
- Design Process
- Implementation Overview
- Road Map for Splinter Session

Purpose of the CSMS Briefing

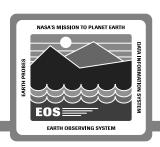


The next set of presentations demonstrates that CSMS:

- provides the interoperability and management functions needed by SDPS and FOS
- has been iteratively refined into subsystems, service superclasses, and services, which have then been mapped into HW/SW CIs
- reflects trade studies and analyses, including the mapping of all major components to COTS categories and present/emerging standards
- satisfies the evolutionary needs of ECS and GCDIS
- has been mapped into the overall ECS release plan, with supporting prototyping of key concepts

SDS-6.3

CSMS Role & Subsystems

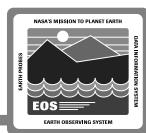


ECS Needs	CSMS Capability	CSMS Approach
Flexible interoperability between DAACs, FOS, other EOSDIS and GCDIS sites	Communications Subsystem (CSS)	Dynamic finding of, and binding to, services
 Network connectivity within DAACs and FOS; between DAACs, FOS, and other EOSDIS and GCDIS sites 	Internetworking Subsystem (ISS)	 Internet standard protocol stacks with high/low speed, LAN/WAN specializations
Effective and efficient management of all ECS resources; coordination with management functions of other EOSDIS & GCDIS sites	Systems Management Subsystem (MSS)	Federated enterprise management
Scalability / Evolvability	 Standards/COTS-based; federated and dynamically associated architecture 	 Architecture based upon consortium-based, OO COTS and near COTS

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SDS-6.4.2

CSMS Subsystems & Open APIs



 Standards-based applications portability for current and future developers

System & Network Management Service Access

Management Framework Access

Mgt Applications Legacy and Future COTS MSS **Interoperability Services Access** Common

> **Direct Object Messaging Access**

> > **Object Interoperability** Access

> > > **Data Transport & OS Access**

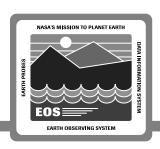
Management Services Common Facilities Object Request Broker Services Object Services

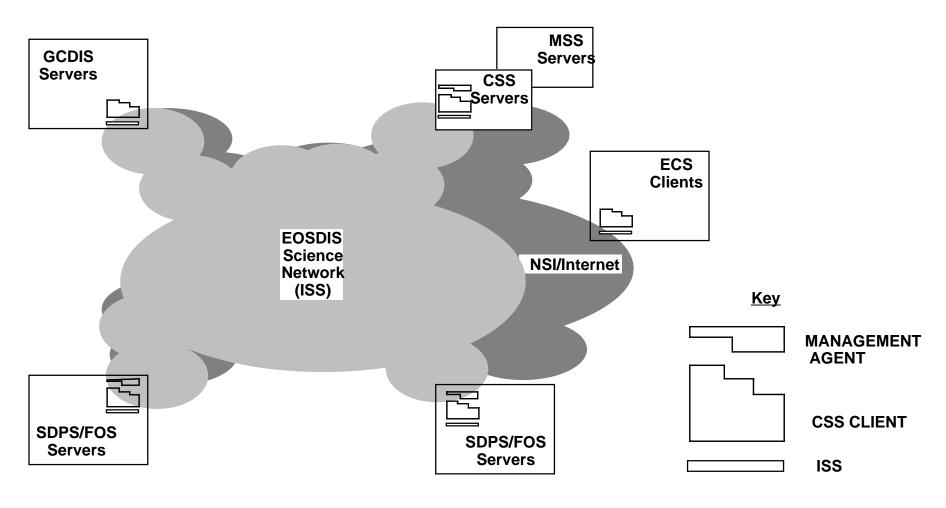
CSS

ISS Operating System & OSI Layers 1 - 4

SDS-6.3

CSMS Context

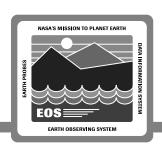


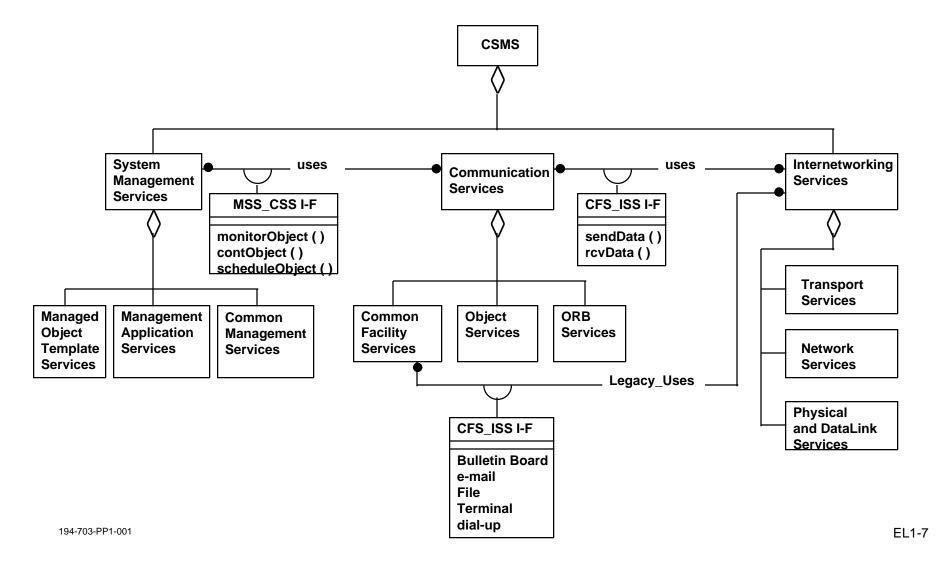


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SDS-6.3

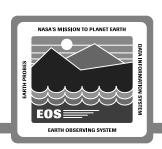
Design Process: Sample OMT Drawing

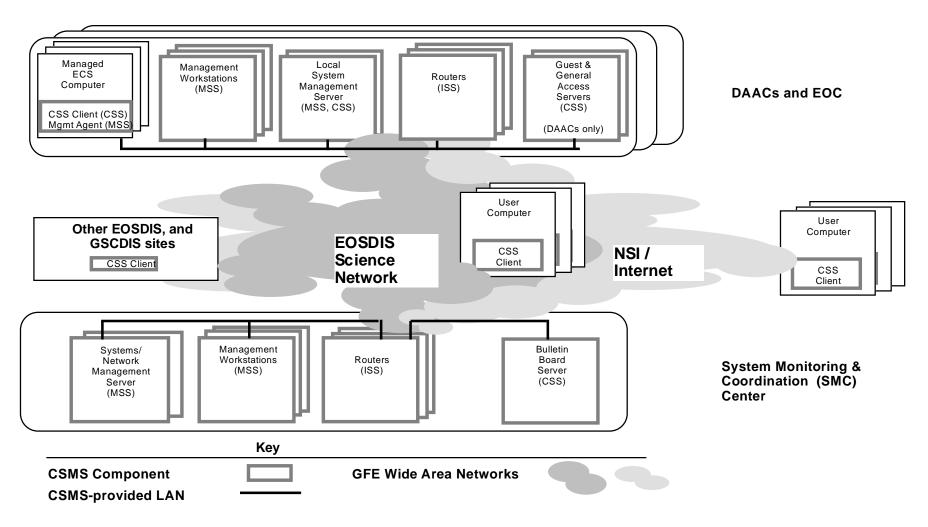




SDS-6.3.4

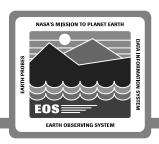
CSMS Implementation Overview





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Road Map



- Introduction
- Communications Subsystem
- CSMS Scenario
- Internetworking Subsystem
- System Management Subsystem
- Summary topics